## **ABSTRACT**

Methods for determining deposit formation tendencies for a plurality of fluid samples of different compositions is provided. Each sample includes fuel additive compositions containing one or more fuel additives or fuel compositions containing one or more fuels and one or more fuel additives. The methods can advantageously be optimized using combinatorial chemistry, in which a database of combinations of fuel compositions are generated. As market conditions vary and/or product requirements or customer specifications change, conditions suitable for forming desired products can be identified with little or no downtime.

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